ADVISORY COMMITTEE ON IMMUNIZATION PRACTICES

September 30, 1971

The meeting was called to order by the Chairman, Dr. David Sencer, who indicated that the current week's Morbidity and Mortality Weekly Report would in large part be devoted to publication of the Public Health Service/ACIP recommendation on smallpox vaccination. At a meeting of the Association of State and Territorial Health Officers on September 22, 1971, the recommendation to discontinue routine smallpox vaccination, substituting selective vaccination of high risk groups had been presented and was met with general accord. Prompt action on legislative and regulatory changes is anticipated in many States.

ROCKY MOUNTAIN SPOTTED FEVER

Supplementary documents were provided to all participants. In general, RMSF surveillance from 1930 has indicated widely fluctuating annual case reports. Between 1930 and 1950 peak of more than 500 cases were apparent. Thereafter, there was a gradual decline to 1960 with approximately 250 reported cases each year. A somewhat gradual increase has occurred since then. The traditional Rocky Mountain focus of the disease has been replaced since the late 1930's by one in the South Atlantic region of the United States. Case fatality declined markedly with the advent of antibiotic therapy.

Original RMSF vaccines were made of suspensions of ticks (1927-1940). Yolk sac source rickettsial antigens are now used. Vaccine studies generally have indicated some degree of protection from vaccination, although more notable has been a modification of the severity of disease and decreased mortality. Little is known of the precise immunology of rickettsial infection. This has been an obvious deterrent to development and evaluation of more effective immunizing agents.

Most RMSF vaccine inquiries are from people whose vocations or avocations expose them to areas where Rocky Mountain Spotted Fever is known to be endemic. It has been estimated that only a few thousand doses of RMSF vaccine are used among civilians each year. There is a greater use of vaccine among the military personnel in areas where the likelihood of infected tick exposure exists.

RMSF vaccine standardization has been difficult because of the limited number of available assay systems. Like all vaccines prepared in eggs, RMSF vaccine has the potentiality of inducing reactions to egg protein. Reports of hypersensitivity reactions allege severe and even fatal consequences.





The Committee asked that a draft statement on RMSF vaccine be prepared and distributed for discussion at its next meeting. The Committee was not eager to encourage use of RMSF vaccine but rather to give a rational prospective for its use in those who have sufficient exposure to benefit from whatever vaccine immunity can be stimulated.

RABIES

All participants were given several summary documents which described the surveillance of human and wildlife rabies in the United States. These summaries pointed out the extensiveness of our wildlife rabies problem in which skunks, foxes, bats, and raccoons (in that order) are the most important reservoirs. Domestic animals, particularly dogs and cats, are quite unimportant in transmitting rabies in the United States. This, in large part, is evidence of the effectiveness of domestic animal rabies immunization.

The status of investigations of rabies immune globulin of human origin (RIG) was reviewed. In addition to the extensive laboratory study of RIG globulin, studies in volunteers have been carried out to determine the height and durability of passively induced rabies antibodies. For example, in contrast to rabies antibodies from animal serums – which persist in humans for 14 to 21 days following injection – those from human globulin are detectable for more than 70 days. Studies in laboratory animals have been very encouraging with respect to protection from combination therapy with globulin and rabies vaccine. Their appropriate dosage for people has yet to be fully developed. It is apparent from animal studies that a carefully balanced schedule of vaccine and globulin will be important. This is because the passive immunity from RIG interferes, in part, with active immunity from vaccine.

HEPATITIS

All participants were given draft copies of a proposed revision on the recommendation on Immune Serum Globulin for the Prevention of Viral Hepatitis.

WORKING GROUPS

Following a preliminary discussion period, the Committee was separated into smaller working groups which carefully worked through the ISG/hepatitis, rabies, and a newly developed Rocky Mountain Spotted Fever vaccine statement.

REVIEW

On the second day of the meeting, the Committee reviewed the reports of working groups and considered the current measles, mumps, and DTP recommendations. The Committee was not satisfied with the Rocky Mountain Spotted Fever or hepatitis statements and recommended they be reworked by CDC staff and submitted for reconsideration. Measles and mumps statements were reviewed and reaffirmed. The rabies statement and DTP statements were deferred for future consideration, pending editorial and minor substantive modifications.

OTHER BUSINESS

The Committee recommended January 20-21, 1972, for its winter meeting. With thanks to the participants for their assistance, the Chairman adjourned the meeting.

Respectfully submitted,

Executive Secretary